

Table 6. Examples of preferred embodiments of the methods for modifying glycosylation in a eukaryotic microorganism, e.g. *Pichia pastoris*

<i>Desired Structure</i>	<i>Suitable Catalytic Activities</i>	<i>Suitable Sources of Localization Sequences</i>	<i>Suitable Gene Deletions</i>	<i>Suitable Transporters and/or Phosphatases</i>
Man ₅ GlcNAc ₂	α-1,2-mannosidase (murine, human, <i>Bacillus</i> sp., <i>A. nidulans</i>)	Mns1 (N-terminus, <i>S. cerevisiae</i>) Och1 (N-terminus, <i>S. cerevisiae</i> , <i>P. pastoris</i>) Ktr1 Mnn9 Mnt1 (<i>S. cerevisiae</i>) KDEL (SEQ ID NO:6), HDEL (SEQ ID NO:5) (C-terminus)	OCH1 MNN4 MNN6	none
GlcNAcMan ₅ GlcNAc ₂	GlcNAc Transferase I, (human, murine, rat etc.)	Och1 (N-terminus, <i>S. cerevisiae</i> , <i>P. pastoris</i>) KTR1 (N-terminus) KDEL (SEQ ID NO:6), HDEL (SEQ ID NO:5) (C-terminus) Mnn1 (N-terminus, <i>S. cerevisiae</i>) Mnt1 (N-terminus, <i>S. cerevisiae</i>) GDPase (N-terminus, <i>S. cerevisiae</i>)	OCH1 MNN4 MNN6	UDP-GlcNAc transporter (human, murine, <i>K. lactis</i>) UD Pase (human)
GlcNAcMan ₃ GlcNAc	mannosidase II	Ktr1 Mnn1 (N-terminus,	OCH1	UDP-GlcNAc

Ac ₂		<i>S. cerevisiae</i>)	MNN4	transporter)
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